

REMARKS

Applicant thanks Examiner Issac and Supervisory Examiner Jiang for their time and consideration of the present application during the personal interview of March 21, 2007 with the undersigned. During the interview, a proposed amendment was discussed. The Examiners stated that the proposed amendment would require further consideration and/or search, and suggested filing an RCE for the entry of the amendment.

Accordingly, this amendment is being filed along with a Request for Continued Examination. This application has been amended in a manner believed to place it in condition for allowance at the time of the next Official Action.

Claims 1-20 are pending in the application.

Claims 1-17 are amended.

Claims 18-20 are new.

Support for the amended and new claims may be found generally throughout the specification, for example, at page 5 lines 13-15, page 10, lines 20-25, page 11, lines 2-20, and page 12, line 8 to page 13, line 4.

The Official Action rejects claims 16-17 under 35 U.S.C. 112, first paragraph, as not complying with the written description requirement. Applicant respectfully disagrees.

Specifically, the position of the Official Action is that claims 16 and 17 recite a combination of features not disclosed in the originally filed specification.

However, the features of claim 16 are disclosed, in combination, in Examples 2, 3, 4: "at least 60% wt water", "viscosity not more than 5 cps", and "at least 90 vol% of pigment particles with dispersed diameter of at most $0.7\mu\text{m}$ " (i.e., a D_{90} of not more than $0.7\mu\text{m}$ for the dispersed diameter of the pigment particles as presently recited). These features are also disclosed, for example, at page 10, lines 20-25, page 11, lines 3-4 and page 12, lines 8-15.

The features of claim 17, e.g., the composition of claim 16, with a polymer emulsion and thickener, are disclosed, for example, in Example 3, with the polymer emulsion including the thickener polyvinyl pyrrolidone, and page 4, lines 21-23 and page 12, line 17 to page 13, line 1.

Therefore, the claims are described in the originally filed specification, and applicant respectfully requests that the written description rejection be withdrawn.

Claims 1-17 are rejected under 35 USC §112, second paragraph, as being indefinite. Applicant respectfully disagrees.

The Official Action maintains the position that the recitations of "at most $0.7\mu\text{m}$ " and "at least 90 vol%" are indefinite, and there is no indication in the specification that applicant's scope include 100% particles or greater than $0\mu\text{m}$ particle size.

Applicant respectfully submits that "The test of definiteness is whether one skilled in the art would understand the scope of the claims when read in the light of the specification." *Bausch & Lomb Inc. v. Alcon Labs. Inc.*, (DCWDNY 1999) 64 F. Supp. 2d 233, 52 PQ2d 1385.

Accordingly, the present claims are amended to recite "dispersed pigment particles having a dispersed diameter distribution with a D_{90} of not more than $0.7\mu\text{m}$ " instead of "at least 90 vol% of pigment particles with a dispersed diameter of at most $0.7\mu\text{m}$ ", as described at specification page 10, lines 20-25 and page 11, lines 11-20. This amendment is non-substantive, and intended to recite the dispersed particle size, or diameter, in a manner consistent with terminology understood by one of ordinary skill in the art. For example, the new recitation is consistent with issued patents, which claim a " D_{90} " without an explicit lower limit.

Thus, "a D_{90} of not more than $0.7\mu\text{m}$ " is definite, as one of ordinary skill in the art, in light of the present specification and the terminology used in the art, would have understood the scope of the claims.

Claims 5-15 are rejected for reciting "cosmetic ingredient". Claims 5-15 no longer recite this term.

Therefore, in view of the above, applicant respectfully requests that the indefiniteness rejection be withdrawn.

The Official Action rejects claims 1-2, 5-6, 9-10, 13 and 14 under 35 USC §102(b) as being anticipated by SER et al. 5,580,546 ("SER"). Applicant respectfully disagrees.

SER is offered for teaching a cosmetic having an average pigment particle size between 0.03 and 0.5 μ m.

However, SER fails to disclose or suggest a dispersion comprising an aqueous dispersing medium, as recited in independent claims 1 and 13. Rather, SER discloses an anhydrous solid dispersion for the purpose of replacing water-containing cosmetic compositions (column 1, lines 13-62). Thus, SER cannot anticipate independent claims 1 and 13 and dependent claims 2, 5-6, 9-10 and 14, as well as new claims 19 and 20.

Therefore, applicant respectfully requests that the rejection be withdrawn.

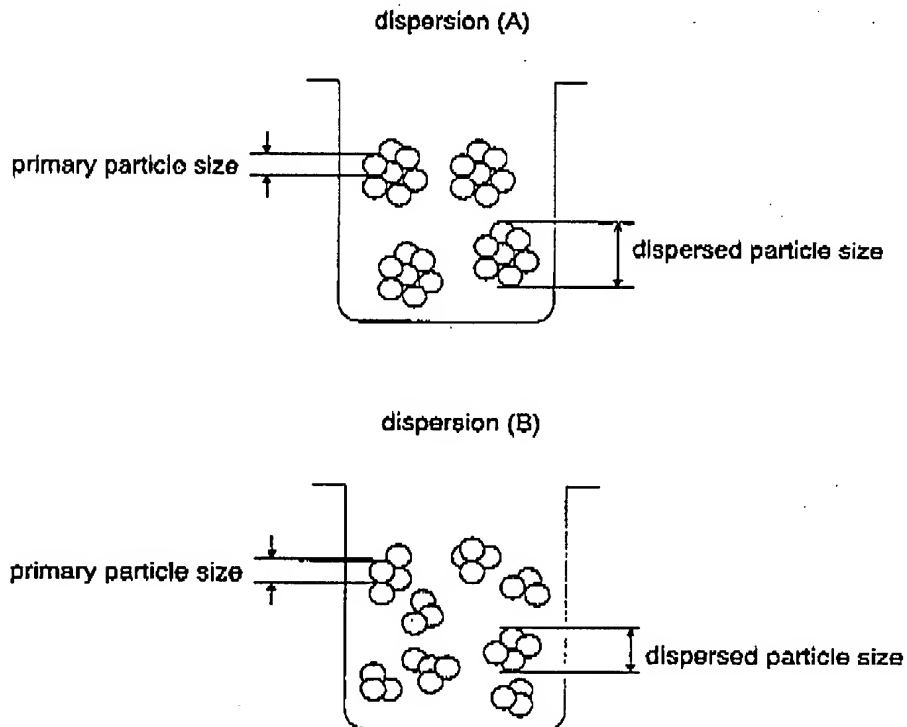
Claims 1-17 are rejected under 35 USC §102(b) as being anticipated by HALL-GOULLE et al. 6,001,168 ("GOULLE"). Applicant respectfully disagrees.

GOULLE is offered for disclosing a pigment dispersion having an average particle size of less than 0.5 μ m, and including the dispersion in cosmetics.

However, GOULLE fails to disclose or suggest a dispersed particle diameter distribution with a D₉₀ of not more than 0.7 μ m, as recited in independent claim 1, 13 and 16, for at least two reasons.

First, GOULLE discloses an average "particle" size, and particles dispersed in a medium have different types of particle sizes. One particle size is a primary particle size, which is the actual size of particle that is independent from its state in the medium. Another particle is a dispersed particle size, which is the apparent size in the medium.

As shown below, dispersion (A) and dispersion (B) comprise particles of the same primary particle size, but have different dispersed particle size. One cannot assume the dispersed particle size based solely on the primary particle size. Referring to "primary particle size" as that "in the liquid" is known.



The claimed invention recites a dispersion having a dispersed diameter, or dispersed particle size, which is determined by laser diffraction scattering principle (e.g., using suitable means such as Microtrack UPA (Nikkiso Corp. as disclosed on page 10, lines 20-25 and page 11, lines 3-20 of the present specification). GOULLE discloses "particle" size, which is determined by Joyce Loeb1 disc centrifuging method, and does not disclose a "dispersed particle size", "dispersed size" or "dispersed diameter".

Second, GOULLE discloses an "average particle size distribution" of 0.0015-0.5 micrometers, determined by Joyce Loeb1 disc centrifuging method. However, it is not clear whether this range of 0.0015-0.5 is the "average" particle size or that the "distribution" falls with this range.

Moreover, none of the examples of GOULLE include any measurement of particle size to explain the meaning of the "average particle size distribution". The Examples include sieving a ball-milled mixture in an unknown condition (Examples 4 and 5), and the particle size of the resulting liquid is unknown.

However, to obtain the claimed invention, the particle size distribution is verified during the milling process in the presence of water, polymer and surfactant (e.g. page 10, line 12 and page 14, line 14). Therefore, a suitable sharp distribution of size is obtained.

Without such verification it is difficult to obtain a suitable size distribution, as milling for too long of a period leads to re-agglomeration of the dispersed particles. Because of this process, the resulting claimed invention has a much improved stability during a long period of time (e.g. page 14, lines 9-12).

GOULLE also fails to disclose the particular water content and viscosity, as recited in independent claim 16, and dependent claim 20. GOULLE discloses water may be included in the pigment dispersion, but does not disclose including any specific amount so as to obtain a particular viscosity.

GOULLE further fails to disclose adding the pigment to an aqueous cosmetic product, as recited in claims 5-12 and 17. Indeed, the compositions to which GOULLE adds the pigment are high molecular mass materials, which do not include aqueous cosmetic products (column 7, line 28 to column 8, line 31 and column 10, line 56 to column 11, line 3).

Thus, in view of the above, GOULLE cannot anticipate claims 1-20.

GOULLE, alone, would also fail to render obvious the claims. GOULLE fails to suggest obtaining a pigment dispersion having dispersed diameter distribution with a D₉₀ of not more than 0.7 μ m, as recited in claims 1-4, 13-16 and 18-20, providing sufficient water to the dispersion to obtain a desired viscosity

as recited in claims 16 and 20, or adding such a pigment to an aqueous cosmetic composition as recited in claims 5-12 and 17.

In view of the above, applicant believes that the present application is in condition for allowance at the time of the next Official Action. Allowance and passage to issue on that basis is respectfully requested.

The Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 25-0120 for any additional fees required under 37 C.F.R. § 1.16 or under 37 C.F.R. § 1.17.

Respectfully submitted,

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